USCMS Engineer Status Report for September 2004

Ianna Osborne

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1 Work Performed This Month

IGUANACMS tutorial has been prepared and given: slides and recording is available at http://agenda.cern.ch/fullAgenda.php?ida=a043603

The tutorial is based on IGUANACMS 1.10.0 released in September. This release is recommended for the users and is stable.It is based on ORCA 8.3.0

IGUANACMS_1_10_0 is based on CMS_95_4 CMS configuration with IGUANA_5_1_1, ORCA 8.3.0, COBRA 7.8.6, OSCAR 3.3.1.

o) VisCobra framework: Event service provided to manipulate with event navigation. Now it is available as a separate menu.

Data cards configuration service renamed to reflect its actual behavior.

o) ORCA Visualisation:

Re-structuring of basic ORCA services and separating DST and Digis handling done.

Exception handling implemented in all critical parts. When an outside exception is caught - a dialog pops up. (Reduced a number of possible crashes.)

Provided the list of containers for Event Info Twig. It is updated on demand and also automatically when a new event arrives. The RecCollections in this tree have a default version in the name.

Daq application is available.

New visualisation configurable is defined to give a user possibility to skip the second step of the setup for ORCA.

Ask to initialize configuration data cards at correct (early enough) time.

Re-engineering of Muon visualisation to make it more flexible and now it is possible to use with DAQ application for Muon test-beams.

Muon reconstruction geometry moved to new packages specific to each muon subsystem.

Materials changed: use non-reflecting colors.

All twigs depending on DT, CSC, RPC moved to VisMuonDT, VisMuonCSC, VisMuonRPC - new packages. The former packages which contained the code for those sub-detectors are obsolete.

RecVertex implemented as an ellips with errors and also a position of it is marked with a marker.

Consistent naming conventions for the twig object field.

o) OSCAR Visualisation: Bug fixes: correct name for obtaining the tracker hits.

Work around to access muon sim hits.

New (very short list) data cards to work with geometry only.

o) CMS week:

Status of IGUANACMS talk is given to APROM meeting: http://agenda.cern.ch/fullAgenda.ph

Overview of the contributions by the Iguana Team presented at CCS technical meeting: http://agenda.cern.ch/fullAgenda.php?ida=a044027

o) Slides prepared for the CPT review;

O) CHEP2004:

o) Oral presentation "Composite framework for CMS applications": http://iguana.web.cern.ch/i 09-27-chep04-iguanacms/

o) Prepared slides for oral presentation "IGUANA project: resent developments" and also have given half of the talk since the speaker did not show up at right time: http://iguana.web.cern.ch/iguana/docs/presentations/2004-09-30-chep04-iguana/

o) Poster "CMS tracker visualisation tools".

o) Papers for all of the above written and submitted.

http://iguana.web.cern.ch/iguana/docs/papers/2004-09-27-chep04-iguanacms/

http://iguana.web.cern.ch/iguana/docs/papers/2004-09-30-chep04-iguana/

2 Plans For Next Month

o) Posters to be prepared for VIP visit and Open Day;

o) Lego plots deployment in IGUANACMS ORCA visualisation;

o) Default set of colours for Geant4 visualisation;

3   Links To Supporting Documentation

- APROM talk transparancies:

- http://agenda.cern.ch/fullAgenda.php?ida=a043744

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- Overview of the contributions by the Iguana Team presented at CCS technical meeting:

- http://agenda.cern.ch/fullAgenda.php?ida=a044027

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- Tutorial:

- http://agenda.cern.ch/fullAgenda.php?ida=a043603

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- Web pages updated:

- http://iguanacms.web.cern.ch/iguanacms/

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- CHEP2004 contributions:

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- http://iguana.web.cern.ch/iguana/docs/papers/2004-09-27-chep04-iguanacms/

- http://iguana.web.cern.ch/iguana/docs/presentations/2004-09-27-chep04-iguanacms/

- http://iguana.web.cern.ch/iguana/docs/papers/2004-09-30-chep04-iguana/

- http://iguana.web.cern.ch/iguana/docs/presentations/2004-09-30-chep04-iguana/